

Virginia Regulatory Town Hall

Final Regulation Agency Background Document

Agency Name:	State Air Pollution Control Board
Regulation Title:	Regulations for the Control and Abatement of Air Pollution
Primary Action:	Article 46 (9 VAC 5-40-6550 et seq.) of 9 VAC 5 Chapter 40
Secondary Action(s):	None.
Action Title:	Emission Standards for Small Municipal Waste Combustors (Revision K00)
Date:	April 7, 2003

Please refer to the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia), Executive Order Twenty-Five (98), and the Virginia Register Form, Style and Procedure Manual for more information and other materials required to be submitted in the final regulatory action package.

Summary

Please provide a brief summary of the new regulation, amendments to an existing regulation, or the regulation being repealed. There is no need to state each provision or amendment or restate the purpose and intent of the regulation.

The regulation applies to small municipal waste combustors (SMWCs), and includes emission limits for particulate matter, carbon monoxide, dioxins/furans, hydrogen chloride, sulfur dioxide, nitrogen oxides, lead, cadmium, and mercury. Special SMWC operator training and qualification requirements are included in order to assure proper facility operation and compliance with the emissions limitations. Compliance, emissions testing, and monitoring requirements are delineated, as well as recordkeeping and reporting of such test results. Finally, specific compliance schedules are provided.

Substantial Changes Made Since the Proposed Stage

Please briefly and generally summarize any substantial changes made since the proposed action was published. Please provide citations of the sections of the proposed regulation that have been substantially altered since the proposed stage.

1. Provisions intended to clarify the distinction between state and federal requirements have been added or revised. [9 VAC 5-40-6550 C; 9 VAC 5-40-6550 D 5; 9 VAC 5-40-6550 E; 9 VAC 5-40-6550 F; 9 VAC 5-40-6550 G; 9 VAC 5-40-6700]
2. The compliance schedule has been revised to reflect final federal plan requirements. [9 VAC 5-40-6550 E; 9 VAC 5-40-6700; 9 VAC 5-40-6710]

Statement of Final Agency Action

Please provide a statement of the final action taken by the agency, including the date the action was taken, the name of the agency taking the action, and the title of the regulation.

On April 7, 2003, the State Air Pollution Control Board adopted final amendments to regulations entitled "Regulations for the Control and Abatement of Air Pollution", specifically, Emission Standards for Small Municipal Waste Combustors (9 VAC Chapter 40, Article 46). The regulation amendments are to be effective on a date as provided in the Administrative Process Act.

Basis

Please identify the section number and provide a brief statement relating the content of the statutory authority to the specific regulation adopted. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to adopt the regulation and that it comports with applicable state and/or federal law.

Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare. Written assurance from the Office of the Attorney General that (i) the State Air Pollution Control Board possesses the statutory authority to promulgate the regulation and that (ii) the regulation comports with the applicable state and/or federal law is available upon request.

Purpose

Please provide a statement explaining the rationale or justification of the regulation as it relates to the health, safety or welfare of citizens.

The purpose of the regulation is to establish emission standards that will require the owners of small municipal waste combustors (SMWCs) to limit emissions of organics (such as dioxins/furans), metals (such as particulate matter), and acid gases (such as sulfur dioxide and hydrogen chloride) to a specified level necessary to protect public health and welfare. The regulation meets the requirements of § 111(d) and § 129 of the federal Clean Air Act, and 40 CFR Part 60 Subpart BBBB of federal regulations.

Substance

Please identify and explain the new substantial provisions, the substantial changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement providing detail of the changes.

The regulation defines and identifies the sources to which it applies, as well as exemptions. Emission limits for particulate matter, carbon monoxide, dioxins/furans, hydrogen chloride, sulfur dioxide, nitrogen oxides, lead, cadmium, and mercury are established, as well as limitations for and cross references to existing state requirements for visible emissions, fugitive dust/emissions, odor, and toxic pollutants. General good operating practices that contribute to the overall effectiveness of the technical requirements are included, in the form of an operator training and qualification program, which is intended to reduce the amount of emissions. A compliance schedule with specific increments of progress is provided. Operating limits for operating parameters such as maximum charge rates, temperature limits, and carbon feed rates and usage are prescribed. Test methods to be used in determining compliance with the emission limits, as well as compliance requirements, including testing schedules, are specified. Equipment necessary to monitor compliance with the site-specific operating limits are to be installed, calibrated, maintained, and operated. Records of monitoring and test results are to be maintained and reported. Air curtain incinerators that burn 100 percent yard waste must meet separate requirements for increments of progress, opacity limits, compliance monitoring and testing, recordkeeping, and reporting. Procedures to be followed in the event of facility and control equipment maintenance or malfunction are provided. Finally, state requirements for facility and control equipment maintenance or malfunction; test methods and procedures; compliance, monitoring; recordkeeping and reporting; registration; and permits are cross-referenced.

Issues

Please provide a statement identifying the issues associated with the regulatory action. The term "issues" means: 1) the primary advantages and disadvantages to the public of implementing the new or amended provisions; and 2) the primary advantages and disadvantages to the agency or the Commonwealth. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

1. Public: The general public will experience a number of health and welfare advantages. SMWC emissions cause a number of serious health effects. Therefore, reduction of these emissions will reduce disease and its related costs. Reduction of SMWC emissions will also reduce the risk of damage to vegetation and property, which

will in turn enhance property values, tax revenues, payroll, and other socioeconomic components. Generally, the wide availability of alternatives to incineration will limit disadvantages, and may in fact provide a benefit in the form of reduced costs.

A number of SMWCs may benefit by seeking more efficient and cost-effective alternatives to incineration. In addition to SMWCs, industry in general will also benefit from the rule: overall ozone reductions may lessen the risk of current attainment areas being designated nonattainment, and current nonattainment areas being reclassified to a more serious classification.

2. Department: The Department may need to perform additional inspection, monitoring and recordkeeping to ensure that the emissions limitations are being met, which will require increased expenditure in personnel and equipment. However, the increase in data to be gathered and analyzed will benefit the Department by enhancing its ability to make both short- and long-term planning decisions. Furthermore, these sources have been permitted, inspected, and monitored for many years, therefore, little—if any—new additional new effort will be expended.

Public Comment

Please summarize all public comment received during the public comment period and provide the agency response. If no public comment was received, please include a statement indicating that fact.

A summary and analysis of the public testimony, along with the basis for the decision of the Board, is attached.

Detail of Changes

Please detail any changes, other than strictly editorial changes, made since the publication of the proposed regulation. This statement should provide a section-by-section description of changes.

1. Provisions intended to clarify the distinction between state and federal requirements have been added or revised. [9 VAC 5-40-6550 C; 9 VAC 5-40-6550 D 5; 9 VAC 5-40-6550 E; 9 VAC 5-40-6550 F; 9 VAC 5-40-6550 G; 9 VAC 5-40-6700]
2. The compliance schedule has been revised to reflect final federal plan requirements. [9 VAC 5-40-6550 E; 9 VAC 5-40-6700; 9 VAC 5-40-6710]
3. Minor corrections and clarifications have been made. [9 VAC 5-40-6560 A; 9 VAC 5-40-6560 B; 9 VAC 5-40-6560 C, definitions of "administrator," "effective date of section 111(d)/129 plan approval," "federally enforceable" and "section 111(d) plan"; 9 VAC 5-40-6690; 9 VAC 5-40-6730 A; 9 VAC 5-40-6740 A; 9 VAC 5-40-6740 C 1; 9 VAC 5-40-6740 D 1 f; 9 VAC 5-40-6750 A; 9 VAC 5-40-6750 C 2; 9 VAC 5-40-6750 I 1 a (3) and (4); 9 VAC 5-40-6750 I 4 d; 9 VAC 5-40-6750 J; 9 VAC 5-40-6760 A; 9 VAC 5-40-6770 A; 9 VAC 5-40-6770 B 1; 9 VAC 5-40-6770 B 3 c (2); 9 VAC 5-40-6780 A]

4. Section titles have been changed from "Limit for ..." to "Standard for ..." in order to maintain consistency with other provisions of the regulations. [9 VAC 5-40-6570 through 9 VAC 5-40-6660]
5. The terms "performance test" and "stack test" have been replaced by the term "emission test" in order to maintain consistency with other provisions of the regulations. [throughout]

Family Impact Statement

Please provide an analysis of the regulatory action that assesses the impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

It is not anticipated that these regulation amendments will have a direct impact on families. However, there will be positive indirect impacts in that the regulation amendments will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in related health and welfare problems.

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COMMONWEALTH OF VIRGINIA
STATE AIR POLLUTION CONTROL BOARD
SUMMARY AND ANALYSIS OF PUBLIC TESTIMONY FOR
REGULATION REVISION K00
CONCERNING

SMALL MUNICIPAL WASTE COMBUSTORS
(9 VAC 5 CHAPTER 40)

INTRODUCTION

At the September 2001 meeting, the Board authorized the Department to promulgate for public comment a proposed regulation revision concerning small municipal waste combustors.

A public hearing was advertised accordingly and held in Richmond on October 10 and the public comment period closed on November 8. The proposed regulation amendments subject to the hearing are summarized below followed by a summary of the public participation process and an analysis of the public testimony, along with the basis for the decision of the Board.

SUMMARY OF PROPOSED AMENDMENTS

The proposed regulation amendments concerned provisions covering small municipal waste combustors. A summary of the amendments follows:

1. The regulation identifies the sources and geographic areas to which the regulation applies, as well as exemptions. [9 VAC 5-40-6550]
2. Terms unique to the article are defined. [9 VAC 5-40-6560]
3. Emission limits for particulate matter, carbon monoxide, dioxins/furans, hydrogen chloride, sulfur dioxide, nitrogen oxides, lead, cadmium, and mercury are established. [9 VAC 5-40-6570 through 9 VAC 5-40-6650]
4. Limitations for and cross references to existing state requirements for visible emissions, fugitive dust/emissions, odor, and toxic pollutants are provided. [9 VAC 5-40-6660 through 9 VAC 5-40-6690]
5. Operator training and qualification requirements are specified. [9 VAC 5-40-6700]
6. A compliance schedule with specific increments of progress is provided. [9 VAC 5-40-6710]

7. Operating limits for operating parameters such as maximum charge rates, temperature limits, and carbon feed rates and usage are prescribed. [9 VAC 5-40-6720]
8. Compliance requirements, including testing schedules, are specified. [9 VAC 5-40-6730].
9. Test methods and procedures for determining compliance with the emission limits are included. [9 VAC 5-40-6740]
10. Equipment necessary to monitor compliance with the site-specific operating limits are to be installed, calibrated, maintained, and operated. [9 VAC 5-40-6750]
11. Records of monitoring and test results are to be gathered and maintained. [9 VAC 5-40-6760]
12. Monitoring and test results must also be reported at certain intervals. [9 VAC 5-40-6770]
13. Air curtain incinerators that burn only yard waste must meet separate requirements for increments of progress, opacity limits, compliance monitoring and testing, recordkeeping, and reporting. [9 VAC 5-40-6780]
14. In the event of facility and control equipment maintenance or malfunction, certain procedures must be followed. [9 VAC 5-40-6800]
15. Cross references are provided for state requirements for facility and control equipment maintenance or malfunction; test methods and procedures; compliance, monitoring; recordkeeping and reporting; registration; and permits. [9 VAC 5-40-6800, 9 VAC 5-40-6740, 9 VAC 5-40-6730, 9 VAC 5-40-6750, 9 VAC 5-40-6760, 9 VAC 5-40-6770, 9 VAC 5-40-6790, 9 VAC 5-40-6810]

SUMMARY OF PUBLIC PARTICIPATION PROCESS

A public hearing was held in Richmond, Virginia on October 10, 2002. No one attended the hearing, and one written comment was received during the public comment period. As required by law, notice of this hearing was given to the public on or about September 9, 2002 in the Virginia Register and in seven major newspapers (one in each Air Quality Control Region) throughout the Commonwealth. In addition, personal notice of this hearing and the opportunity to comment was given by mail to those persons on the Department's list to receive notices of proposed regulation revisions. A list of hearing attendees and the complete text or an account of each person's testimony is included in the hearing report which is on file at the Department.

ANALYSIS OF TESTIMONY

Below is a summary of each person's testimony and the accompanying analysis. Included is a brief statement of the subject, the identification of the commenter, the text of the comment and the Board's response (analysis and action taken). Each issue is discussed in light of all of the comments received that affect that issue. The Board has reviewed the comments and developed a specific response based on its evaluation of the issue raised. The Board's action is based on consideration of the overall goals and objectives of the air quality program and the intended purpose of the regulation.

1. **SUBJECT:** General § 111(d)/129 plan requirements.

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: 40 CFR Part 60, subpart B, requires a state § 111(d)/129 plan to contain an enforceable mechanism (e.g., state regulation) that incorporates all applicable emission guideline (EG) requirements. If any required EG provision is not included in the state regulation, the plan is not approvable by EPA.

RESPONSE: All EG provisions are included in the state regulation.

No change has been made to the proposal as a result of this comment.

2. **SUBJECT:** Delegation of authority.

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: EPA will not delegate to states certain regulatory authorities that are reserved for action by the administrator only. This retention of discretionary federal authority is consistent with EPA's new source performance standards delegation policy, source-specific § 111(d)/129 rule provisions (subpart BBBB, 40 CFR 60.1650(d)), and EPA's March 19, 1999 letter to the department regarding this matter. In Virginia's case, short of amending its proposed regulation, the plan narrative could clarify EPA and board authority, consistent with EPA regulations and policy, and the provisions VAC 5-20-80, Relationship of state regulations to federal regulations. The purpose for EPA's retention of certain federal authorities is to help assure: 1) state regulations are "at least as protective" as the EG emission limitations and other § 129 requirements, and 2) national consistency in the implementation and enforcement of § 111(d)/129 plans.

RESPONSE: The assignment of regulatory authorities is contained in the § 111(d)/129 plan narrative, as found in the draft plan submitted to EPA on September 19, 2002, not in the implementing regulation. They are consistent with the associated NSPS (40 CFR 60.1030).

No change has been made to the proposal as a result of this comment.

3. **SUBJECT:** Applicability. [9 VAC 5-40-6550 D 5]

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: Subpart BBBB states that hazardous waste combustion units are exempt from the state plan if the units have received a permit under § 3005 of the Solid Waste Disposal Act (SWDA). However, 9 VAC 5-40-6550 D 5 references a state rule, 9 VAC 20-60-10 et seq., instead of § 3005 of the SWDA. For purposes of rule enforceability and consistency with subpart BBBB, please discuss the equivalency of § 3005 of the SWDA and 9 VAC 20-60-10 et seq. A copy of the applicable cross-referenced Virginia regulation must be submitted to EPA at the time of plan submittal, unless it has been approved as a portion of a preceding § 111(d)/129 plan submittal.

RESPONSE: 9 VAC 20-60-10 et seq. has been approved by EPA as the acceptable means by which the SWDA is to be implemented in Virginia. Therefore, no additional analysis is necessary. In order to clarify this issue, the regulation is being revised to return to the EPA language stating that hazardous waste combustion units are exempt from the state plan if the units have received a permit under § 3005 of the Solid Waste Disposal Act. We will then add a separate provision specifying that for the purposes of this regulation, such permit will be one issued under 9 VAC 20-60-10 et seq. This provision will then not be included as part of the § 111(d)/129 plan. This approach should make the regulation follow EPA preference as well as continue to provide user-friendly information to affected sources. If necessary, the approval status of the waste regulation can be reviewed and discussed by Region III air staff with Region III waste staff.

4. **SUBJECT:** Increments of progress. [9 VAC 5-40-6710]

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: § 129(f)(2) of the Clean Air Act and 40 CFR 60.24(c) both require compliance with applicable EG requirements as "expeditiously as practicable." In addition, § 129(b)(3) of the Act requires EPA to promulgate a federal plan for those states which have not submitted an approvable plan within two years after the date of the promulgated EG. Therefore, the statutory date for promulgation of a federal plan is December 6, 2002. State plans approved after promulgation of the federal plan must contain compliance schedules, including enforceable increments of progress, which are no less stringent than those contained in the federal plan. This requirement is discussed in the proposed federal plan (66 FR 32484). Promulgation of the federal plan is expected in the near future.

RESPONSE: Region III's assertion that state plans approved after promulgation of the federal plan must contain compliance schedules no less stringent than those contained in the federal plan is incorrect. To the contrary, § VI C 1 of the proposed federal plan states, "After small MWC units in a State or Tribal area become subject to the Federal Plan, the State or Tribal agency may still adopt and submit a plan to EPA. If EPA determines that the State or tribal plan is as protective as the **emission guidelines**, EPA will approve the State or tribal plan." (Emphasis ours.) 9 VAC 5-40-6710 A requires

compliance "as expeditiously as possible." Specific compliance dates and increments of progress are also fully consistent with EG requirements.

Because the final federal plan was promulgated before the final adoption date of this regulation, we were able to incorporate the plan's compliance schedule date. Had the plan been promulgated later, this would have not been possible.

5. **SUBJECT:** Operator training. [9 VAC 5-40-6700 A 3]

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: EPA retains the authority to waive the training requirement of 40 CFR 60.1650(a) for chief facility operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the effective date of state plan approval. Waiver requests must be submitted to the administrator, not the board. This is consistent with the requirements for large municipal waste combustor units.

RESPONSE: It does not appear that Region III is aware of EPA HQ policy on this issue. While the federal plan for large municipal waste combustor units indicates a policy of retaining this authority, as reflected in 40 CFR 62.14100, this does not appear to be the case with the small municipal waste combustor units. The Region III comment is not consistent with the policy for small municipal waste combustor units, as reflected in 40 CFR 62.15405 of the federal plan. In 40 CFR 62.15405, the list of authorities to be retained by the Administrator does not include the corresponding provision in the federal plan, which is found in 40 CFR 62.15105(d). For some reason, EPA HQ has explicitly distinguished small from large municipal waste combustors, which makes consistency between the two irrelevant; and Virginia respects that. However, Region III appears to disagree with EPA HQ on this matter. If Region III does not agree with EPA HQ on this matter, it should take the issue up with EPA HQ. States should not have to bear the responsibility of having to adopt regulatory provisions to address Region III's policy differences with EPA HQ.

No change has been made to the proposal as a result of this comment.

6. **SUBJECT:** Operator training. [9 VAC 5-40-6700 C 1 and C 3]

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: For purposes of rule enforceability and clarity, EPA needs to know the applicable plan provisions, or exclusions, if any, under the Board for Waste Management Facility Operators (18 VAC 155-20-10 et seq.) rule and § 54.1-2212 of the Code of Virginia for the certification of SMWC operators. This request is consistent with 40 CFR 60.26(a) and (b). A copy of the applicable crossed-referenced VAC regulation and Code must be submitted to EPA at the time of plan submittal, unless it has been approved as a portion of a preceding § 111(d)/129 plan submittal.

RESPONSE: The regulation has been revised to include a general statement --consistent with the requirements of the EG--that operators shall comply with either a state-approved program or the ASME program, and that for the purposes of this regulation, the state-approved program is the Board for Waste Management Facility Operators program. The specific state program will then not need to be included as part of the § 111(d)/129 plan.

7. **SUBJECT:** Operator training. [9 VAC 5-40-6700 G]

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: If there is a violation of an applicable provision of 18 VAC 155-20-10 et seq., what state agency will be assigned the responsibility for carrying out and enforcing the operator training and certification requirements of the § 111(d)/129 plan? For example, if a violation of an SMWC operator training and certification requirement of the § 111(d)/129 plan were to occur, what state agency would issue the notice of violation? This requested explanation is consistent with the requirement of 40 CFR 60.26(d).

RESPONSE: The Department of Environmental Quality and the Department of Professional and Occupational Regulation, representing, respectively, the State Air Pollution Control Board and the Virginia Board for Waste Management Facility Operators, are both responsible for enforcing their respective sets of regulations. Generally, enforcement of a regulation is not articulated in the regulation itself.

Many regulations cross-reference the requirements of other agencies. Most sources must meet the regulatory requirements of more than one agency. In addition to meeting the requirements of this regulation, SMWC operators must also meet an array of federal, state, and local water, waste, and zoning laws and regulations. Affected SMWCs have been subject to the operator licensing law and regulations, as well as other air quality regulations, in the absence of this regulation; no enforcement issues have ever been identified.

No change has been made to the proposal as a result of this comment.

8. **SUBJECT:** State-only provisions. [9 VAC 5-40-6680, 9 VAC 5-40-6690]

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: 9 VAC 5-40-6680 (odor) and 9 VAC 5-40-6690 (toxics) are outside the scope and requirements of the emission guidelines. Is it DEQ's intent to include these sections in the proposed § 111(d)/129 plan? EPA has no authority under the Clean Air Act to approve plan provisions that relate to the control of odors or state toxics programs. If the department plans to include these sections, provide EPA with an enforceable copy of the referenced regulations for review and comment.

RESPONSE: As indicated in the draft plan submitted to EPA on September 19, 2002, these provisions are state-only, and will not be submitted for approval as part of the plan.

No change has been made to the proposal as a result of this comment.

9. **SUBJECT:** Continuous monitoring. [9 VAC 5-40-6730 A 2 b, 9 VAC 5-40-6750 A 2 b]

COMMENTER: U.S. Environmental Protection Agency, Region III

TEXT: 9 VAC 5-40-6730 A 2 b and 9 VAC 5-40-6750 A 2 b reference 40 CFR 60.11 and 60.13(c), respectively. Each allows, under 40 CFR 60.11(e)(5) and (6), the use of continuous opacity monitoring system (COMS) data in lieu of Method 9 observation data and allows the administrator to make appropriate adjustments to the opacity standard, providing certain conditions are met. The noted provisions of 40 CFR 60.11(e) are not applicable to affected sources and are superceded by the requirements, including a special provision (e.g., 40 CFR 60.1760(e)), as set forth under subpart BBBB, and as promulgated under § 129 of the Clean Air Act. In other words, Method 9 is the only authorized visible emission compliance method, and the administrator can only revise an emission standard, unless there has been a demonstration that the proposed standard revision is "at least as protective" as the EG emission limitation.

RESPONSE: In the Federal Register of January 31, 2003 (68 FR 5144), EPA revises 40 CFR 62.02(b)(2) to state: "The part 60 subpart A of this chapter general provisions and appendices to part 60 apply to part 62, except as follows: 40 CFR 60.7(a)(1), 60.7(a)(3), and 60.8(a) and where special provisions set forth under the applicable subpart of this part shall apply instead of any conflicting provisions." 40 CFR 60.11 is not included in this list. Therefore, our reference to 40 CFR 60.11 is consistent with EPA policy.

We also note that 9 VAC 5-40-6750 J is equivalent to 40 CFR 60.1760(e), which specifies the use of Method 9. Also, 40 CFR 60.1760(b) specifically cites 40 CFR 60.13; 9 VAC 5-40-6750 B 2 is consistent with this provision. Overall, the structure of the Virginia regulation is consistent with the structure of the EPA regulations.

Also note that the draft § 111(d)/129 plan submitted to EPA on September 19, 2002 requires that the Department obtain approval from EPA Region III before implementing approval of alternative methods, equivalent methods, or major changes to reference methods.

No change has been made to the proposal as a result of this comment.

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